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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,083	11/29/2001	Jorg Schieferdecker	454-010513-US(PAR)	9326
2512	7590	12/16/2003	EXAMINER	
MORAN, TIMOTHY J				
ART UNIT			PAPER NUMBER	
2878				

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

Application No.

09/914,083

Applicant(s)

SCHIEFERDECKER ET AL.

Examiner

Timothy J. Moran

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) encl.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DOCUMENT HANDLING ISSUES**

The papers filed on July 17, 2002 (certificate of mailing dated July 10, 2002) have not been made part of the permanent records of the United States Patent and Trademark Office (Office) for this application (37 CFR 1.52(a)) because of damage from the United States Postal Service irradiation process. The above-identified papers, however, were not so damaged as to preclude the USPTO from making a legible copy of such papers. Therefore, the Office has made a copy of these papers, substituted them for the originals in the file, and stamped that copy:

**COPY OF PAPERS  
ORIGINALLY FILED**

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If applicant wants to review the accuracy of the Office's copy of such papers, applicant may either inspect the application (37 CFR 1.14(d)) or may request a copy of the Office's records of such papers (*i.e.*, a copy of the copy made by the Office) from the Office of Public Records for the fee specified in 37 CFR 1.19(b)(4). Please do **not** call the Technology Center's Customer Service Center to inquire about the completeness or accuracy of Office's copy of the above-identified papers, as the Technology Center's Customer Service Center will **not** be able to provide this service.

If applicant does not consider the Office's copy of such papers to be accurate, applicant must provide a copy of the above-identified papers (except for any U.S. or foreign patent documents submitted with the above-identified papers) with a statement that such copy is a complete and accurate copy of the originally submitted documents. If applicant provides such a copy of the above-identified papers and statement within **THREE MONTHS** of the mail date of this Office action, the Office will add the original mailroom date and use the copy provided by applicant as the permanent Office record of the above-identified papers in place of the copy made by the Office. Otherwise, the Office's copy will be used as the permanent Office record of the above-identified papers (*i.e.*, the Office will use the copy of the above-identified papers made by the Office for examination and all other purposes). This three-month period is not extendable.

## **DETAILED ACTION**

### ***International Reports***

The International Search Report completed September 23, 1999, and the International Preliminary Examination Report completed April 17, 2001 have been considered by the examiner.

### ***Specification***

The disclosure is objected to because of the following informalities: Headings such as "BACKGROUND OF THE INVENTION," "SUMMARY OF THE INVENTION," "BRIEF DESCRIPTION OF THE DRAWINGS," and "DETAILED DESCRIPTION OF THE INVENTION" should be inserted.

### ***Claim Rejections - 35 USC § 112***

*The following is a quotation of the first paragraph of 35 U.S.C. 112:*

*The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.*

Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 11, neither the specification nor the drawings teach that the imaging element (12, fig. 6a and fig. 6b) forms a window.

*The following is a quotation of the second paragraph of 35 U.S.C. 112:*

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

Claim 4 and 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the term "housing of the design TO5" is not described in the specification in a way that sufficiently teaches one of ordinary skill in the art whether a particular sensor module is within the scope of the claim.

Regarding claim 14, the term "analogous" is not clear. Is the term intended to be "analog"?

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-6, 10, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Oda, EP Patent No. 0 845 664. Regarding claims 1 and 17, Oda describes (col. 6, lines 33-39) a sensor module comprising a sensor element (401), a reference means (403), and a processing circuit and combination means ("integrated circuit" mentioned in col. 6, line 38), where the elements are formed as an integrated circuit on a single chip. The presence of a common housing is implied.

Regarding claims 5-6, the use of amplifiers is implied.

Regarding claim 10, Oda describes an imaging device (col. 1, lines 7-15).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-3, 7-8, 12-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda. Regarding claims 2-3, conductive housings and small cylindrical housings are well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such housings in the device of Oda for the advantage of protection.

Regarding claim 7, the use of squaring means is well known in the art of radiation detectors to process signals. Therefore it would have been obvious to one of ordinary

skill in the art to use such elements in the device of Oda for the advantage of enhanced signal.

Regarding claim 8, signal compensation for power dissipation is well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such compensation in the device of Oda for the advantage of enhanced signal.

Regarding claim 12, imaging elements comprising mirrors and lenses are well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such elements in the device of Oda for the advantage of enhanced signal.

Regarding claim 13, digital programming means are well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such elements in the device of Oda for the advantage of flexible programming.

Regarding claims 14-15, integrating amplifiers and A/D convertors are well known in the art of radiation detectors. Therefore it would have been obvious to one of ordinary skill in the art to use such elements in the device of Oda for the advantage of enhanced signal.

Regarding 16, the use of an infrared radiation sensor to control a temperature value is well known in the art of infrared radiation sensors. Therefore it would have been obvious to one of ordinary skill in the art to use circuits to enable such control in the device of Oda for the advantage of controlling temperature.

Regarding 18, the use of power functions to simulate the response of a sensor is well known in the art of sensors. Therefore it would have been obvious to one of ordinary skill in the art to use circuits to enable such simulation in the device of Oda for the advantage of proper temperature compensation.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oda as applied to claim 1 above, and further in view of Rosenthal, U. S. Patent No. 4,801,804. Oda does not teach the use of an electrically conductive window. However, Rosenthal teaches that an electrically conductive window in an infrared detector produces the advantage of shielding from electromagnetic interference (col. 4, lines 28-33). Therefore it would have been obvious to one of ordinary skill in the art to provide such a window in the device of Oda for the advantage of electromagnetic shielding.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Moran whose telephone number is 703-305-0849. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 703-308-4852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



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T.M.

TM

December 2, 2003

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PRIMARY EXAMINER  
GROUP ART UNIT 2878